

Serial No. 09/847,182

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correct

[0005a] Veinseal® 14000 is an effective, but expensive, anti-veining agent, costing about \$650 per ton, and in the operation of a modern foundry, producing tens of thousands of internal combustion engine blocks and cylinder heads per year, the use of such anti-veining agents at the minimum effective concentration of 5% by weight of the sand cores can cost as much as \$700,000 per year.

### IN THE CLAIMS

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1. (Once Amended) A sand core for metal casting, comprising less than about 4% by weight of a lithia-containing material about 1% or more by weight of  $\text{Fe}_2\text{O}_3$  and the balance of core sand and a core sand binder, all formed into a sand core.

2. (Once Amended) The sand core of claim 1 wherein the amount of  $\text{Fe}_2\text{O}_3$  comprises about 1% by weight.

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5. (Once Amended) A mixture for forming a sand core, comprising about 1.5% 1.0% to about 3.5% by weight of a lithia-containing material, about 1% or more by weight of  $\text{Fe}_2\text{O}_3$ , and the balance of core sand and a core sand binder.

6. (Once Amended) The mixture of claim 5 wherein the amount of  $\text{Fe}_2\text{O}_3$  comprises about 1% by weight.

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10. (Once Amended) A method of making a sand core for casting, comprising uniformly mixing together a core sand, an effective amount of binder, about 1% to about 3.5% by weight of a lithia-containing material, and about 1% by weight of  $\text{Fe}_2\text{O}_3$  as a core-forming material, and forming the core-forming material into a sand core.

12. (Once Amended) The method of claim 10 wherein the lithia containing material comprises 2-5% of  $\text{LiO}$ , 10-25% of  $\text{TiO}_2$ , 15-25% of  $\text{Al}_2\text{O}_3$ , 10-20% of  $\text{Fe}_3\text{O}_4$ , and 60-70% of  $\text{SiO}_2$ .

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13. (Once Amended) A method of making a sand core for casting, comprising uniformly mixing together a core sand, an effective amount of core sand binder, an anti-veining material comprising less than about 5% by weight of a lithia-containing material and about 1% or